

*32* 30. (Twice Amended) Heart control apparatus, comprising circuitry for generating a non-excitatory electric field, and electrodes for applying to a heart or to a portion thereof said non-excitatory electric field to modify an activity of the heart or a portion thereof, wherein said circuitry for generating a non-excitatory electric field generates a field with a timing relative to the activation of the heart or of a portion thereof, and of a magnitude, shape, duty cycle, phase, frequency, and duration which is unable to generate a propagating action potential.

*34* 31. (Twice Amended) Cardio-vascular surgery aiding apparatus, comprising circuitry for generating a non-excitatory electric field, and electrodes for applying to a heart chamber or to a portion thereof said non-excitatory electric field to modify an activity of the heart or a portion thereof, wherein said circuitry for generating a non excitatory electric field generates a field of a magnitude, shape, duty cycle, phase, frequency and duration suitable to reduce the output flow, contractility, or pressure of said chamber, when surgery is performed on tissue perfused by the flow of said chamber, and wherein said field is unable to generate a propagating action potential, and thereafter performing the required surgical procedure on said area.